



(19)

(11) Publication number: **2000**

Generated Document.

PATENT ABSTRACTS OF JAPAN(21) Application number: **10242900**(51) Intl. Cl.: **B24B 37/00 H01L 21/304**(22) Application date: **28.08.98**

(30) Priority:	(71) Applicant: TORAY IND INC
(43) Date of application publication: 07.03.00	(72) Inventor: HASHISAKA KAZUHIKO JIYOU KUNITAKA OKA TETSUO
(84) Designated contracting states:	(74) Representative:

(54) ABRASIVE PAD

(57) Abstract:

PROBLEM TO BE SOLVED: To improve polishing rate and reduce a scratch by providing a groove in a polishing surface of a polishing layer and increasing the width of the shallowest part of the groove than the width of the deepest part of the groove.

SOLUTION: For width of a groove formed in polishing layer of the abrasive pad, the width of the shallowest part is longer than the width of the deepest part. When the width of the shallowest part of the groove is shorter than or equal to the width of the deepest part of the groove, retaining ability or fluidity of a polishing slurry on the surface of the abrasive pad and removing efficiency from the surface of the abrasive pad of a threatening attitude figure become insufficient, improvement of polishing rate or reduction of scratch notches cannot be performed, and therefore, this case is not preferable. When the abrasive pad is used for flatting a

semiconductor wafer with a CMP, a multilayered abrasive pad having the polishing layer having a polishing surface whose micro rubber A hardness is higher than 70 degrees and a cushion layer whose micro rubber A hardness is lower by more than 10 degrees than the polishing surface is used.

COPYRIGHT: (C)2000,JPO